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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,888	09/11/2003	Edmund A. Flexman	AD6937 US NA	4997
23906	7590	09/29/2004	EXAMINER	
E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			REDDICK, MARIE L.	
			ART UNIT	PAPER NUMBER
			1713	
DATE MAILED: 09/29/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

VV

# Office Action Summary

Application No.

10/659,888

Applicant(s)

FLEXMAN ET AL

Examiner

Judy M. Reddick

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09/11/03; 12/10/03; 06/28/04.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-19 is/are rejected.  
7) ☒ Claim(s) 16, 17 and 20 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/10/03; 06/28/04.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements filed 12/10/03 and 06/28/04 have been considered and scanned into the application file.

Claim Objections

2. Claims 16 and 17 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 6 & 7. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).
3. Claim 20 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim.. See MPEP § 608.01(n). Accordingly, the claim 20 has not been further treated on the merits.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - A) The recited "for improved compatibility" per claims 1 & 13 constitutes indefinite subject matter as per the entity that the composition is to be compatible with is not readily ascertainable.
  - B) The recited contents governing components (a), (b) and (c) per claims 1, 13 & 19 constitute indefinite subject matter as per it not being readily ascertainable as to the exact entity that said contents are being based on, i.e., total composition, matrix material or other.

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C) The recited "ethylene vinyl acetate (EVA), ethylene methyl acrylate (EMA), ethylene butyl acrylate carbon monoxide (EBACO), ethylene vinyl acetate carbon monoxide (EVACO), ethylene butyl acrylate glycidolmethacrylate (EBAGMA)" per claim 4 constitutes indefinite subject matter as per it not being readily ascertainable as to if monomers or polymers are intended. It is suggested that applicant insert hyphens between the monomer units so as to avoid any confusion, e.g., "ethylene-vinyl acetate (EVA)".

D) The recited "preferably CaCO<sub>3</sub>" per claim 9 and preferably TiO<sub>2</sub>" per claim 10 constitute indefinite subject matter as per it not being readily ascertainable as to if or how said objectionable phrase further limits the claims, i.e., it is unclear whether the limitations following the phrase are a part of the claimed invention. See MPEP § 2173.05 (d).

E) The recited "the elastomer" and "the matrix resin" per claim 13 constitutes indefinite subject matter as per the non-express establishment of proper antecedent basis.

F) The recited "the mineral filler having a coating of a non-aromatic organic acid, a salt, ester, ether, epoxy, or mixture thereof" per claim 18 constitutes indefinite subject matter as per the non-express establishment of proper antecedent basis. It is suggested that use of "has" in lieu of "having" be adopted.

## Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 1-8, 11-17 & 19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Takahashi et al (U.S. 4,692,480).

Takahashi et al teach thermoplastic resin compositions defined basically as containing a melt blend of a) a thermoplastic resin which includes organic polymeric material having a crystalline structure such as polyacetal (homopolymer or copolymer), aromatic polyesters such as polybutylene, polyethylene and polypropylene terephthalates, polystyrene, etc. (Abstract, col. 1, lines 47-68 and col. 2, lines 1-22), b) 1 to 60 wt. % of a spherical hollow mineral filler material (treated or untreated) having a mean particle diameter of less than 500  $\mu\text{m}$  and preferably from 1 to 200  $\mu\text{m}$  composed of silicate and preferably in the form of spherical hollow glass beads (col. 2, lines 23-68) wherein the spherical hollow filler material is preferably treated with a surfacing agent such as epoxy-based, silane-based and titanate-based materials (col. 3, lines 3-11). Takahashi et al further specifically teach that other conventional adjuncts may be added to the composition which include particulate additives such as calcium carbonate, etc. (col. 3, lines 12-34). Takahashi et al further specifically teach that it is possible to also add one or more kinds of organic polymers to the composition which include rubber-like polymer materials such as polyurethane, copolyesters, polyacrylate resins, etc. (col. 3, lines 35-46). Takahashi et al further exemplify extruded thermoplastic resin compositions that comprise at least polybutylene terephthalate & spherical hollow glass filler (Runs 3 and 4) and polyacetal and spherical hollow glass filler (Runs 10 & 11). Takahashi et al further teach a thermoplastic resin composition comprising 40 to 99 wt. % of a thermoplastic resin having a crystalline structure that includes polyacetal, polyester and polystyrene and 1 to 60 wt. % of spherical hollow filler governed by a particle diameter of 500  $\mu\text{m}$  or smaller (Claims). Takahashi et al therefore anticipate the instantly claimed invention with the understanding that one having ordinary skill in the art would have readily envisaged the use of a rubber-like polymer in the Runs 3, 4, 10 and 11, in contents falling within the scope of the invention, as claimed, following the antecedently recited guidelines.

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It has been held that where applicant claims a composition in terms of function, property or characteristic where said function is not explicitly shown by the reference and where the examiner has explained why the function, property or characteristic is considered inherent in the prior art, it is appropriate for the examiner to make a rejection under both the applicable section of 35 USC 102 and 35 USC 103 such that the burden is placed upon the applicant to provide clear evidence that the respective compositions do in fact differ. In re Best, 195 USPQ 430, 433 (CCPA 1977); In re Fitzgerald et al., 205 USPQ 594, 596 (CCPA 1980).

Even if it turns out that the Examiner has somehow missed the boat and the claims are not anticipated by the disclosure of Takahashi et al, it would have been obvious to the skilled artisan to extrapolate, from Takahashi et al, the precisely defined composition, as claimed, as per such having been within the purview of the general disclosure of Takahashi et al and with a reasonable expectation of success.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time

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any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 9, 10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (U.S. 4,692,480).

The disclosure of Takahashi et al is relied upon for all that it teaches as stated in the Grounds of Rejection supra as applied to claims 1-8, 11-17 and 19. Further, as to claims 9 and 18, the generic content of calcium carbonate and surface treatment agent, respectively, per Takahashi et al necessarily implies that any content of calcium carbonate and surface treatment agent, including the claimed content of calcium carbonate and surface treatment agent, would have been operable within the scope of patentees invention and with a reasonable expectation of success, absent a showing of criticality commensurate in scope with the claims. As to claim 10, the interchangeability of one well-known mineral filler for another is a matter of ordinary choice to the skilled artisan, absent some evidence of unusual or unexpected results.

#### Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1-9 and 11-19 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Moriwaki et al (U.S. 6,399,695 B1).

Moriwaki et al teach thermoplastic polyester resin compositions defined basically as containing 60 to 90 parts by weight of thermoplastic polyester resin such as polyethylene terephthalate, 10 to 40 parts by weight of a carboxyl-modified metallocene catalyzed polyolefin elastomer, 10 to 200 parts by weight of inorganic mineral filler which

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include calcium carbonate, talc, mica, etc. and governed by a particle size of 0.1 to 10  $\mu$  and wherein the inorganic mineral filler is surface treated before hand by 0.01 to 0.5 wt. % of a silane coupling agent, or stearic acid or metallic salts thereof(the Abstract, , col. 1, lines 5-8 and 51-60, col. 2, lines 1-45, col. 4, lines 47-54, cols. 5 & 6 and col. 7, lines 1-27 and the Runs). Moriwaki et al therefore anticipate the instantly claimed invention with the understanding that the composition of Moriwaki et al overlaps in scope with the claimed composition.

It has been held that where applicants claims a composition in terms of function, property of characteristic where said function is not explicitly shown by the reference and where the Examiner has explained why the function, property or characteristics is considered inherent in the prior art, it is appropriate for the Examiner to make a rejection under both the applicable sections of 35 USC 102 and 35 USC 103 such that the burden is placed upon applicant to provide clear evidence that the respective compositions do, in fact, differ as provided for under the guise of *In re Best*, 195 USPQ 430, 433(CCPA 1977); *In re Fitzgerald et al*, 205 USPQ 594.

While it appears that all the dependent claim limitations are met, if not taught or suggested, the limitations would have been obvious to the skilled artisan and with a reasonable expectation of success, i.e., any additional or particular claim parameters which may not be specifically set out in the references are considered to be inherent in the reference products or not to involve anything unobvious absent a showing to the contrary.

Even if it turns out that the claims are not anticipated, it would have been obvious to the skilled artisan to extrapolate, from Moriwaki et al, the precisely defined composition, as claimed, as per such having been within the purview of the general disclosure of Moriwaki et al and with a reasonable expectation of success.

### ***Claim Rejections - 35 USC § 103***

14. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moriwaki et al(U.S. 6,399,695 B1).

The disclosure of Moriwaki et al is relied upon for all that it teaches as stated in the Grounds of Rejection supra as applied to claims 1-9 and 11-19. Further, the interchangeability of one well known mineral filler for another is a matter of



ordinary choice to the skilled artisan, absent some evidence of unusual or unexpected results.

#### Conclusion

15. The prior art to TONEN CHEM CORP (JP 05-140428, Machine Translation), listed on the attached FORM PTO 892, is cited as of interest in teaching a polyester resin composition defined basically as containing 50 to 95 wt. % of a polyester, 1 to 40 wt. % of a thermoplastic styrenic elastomer modified with an unsaturated glycidyl compound and 4 to 45 wt % of an inorganic filler. A rejection, in the future, may be made based on this prior art. However, since a valid rejection appears on the record, a rejection at this time is not being made. The additional remaining prior art, listed on the attached FORM PTO 892, is cited as of interest in teaching compositions containing at least an aromatic polyester and a filler and is considered merely cumulative to the prior art supra.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (571)272-1110. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Judy M. Reddick

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*Judy M. Reddick*

Primary Examiner  
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JMR *JMR*  
09/24/04